PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Mail Stop Patent Application Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

NEW APPLICATION TRANSMITTAL Under 37 CFR § 1.53(b)

Transmitted herewith for filing is the patent application of

Inventor(s):

Mark Vandlik and Tom Westberg

WARNING: 37 C.F.R. § 1.41(a)(1) points out:

(a) A patent is applied for in the name or names of the actual inventor or inventors.

(1) The inventorship of a nonprovisional application is that inventorship set forth in the oath or declaration as prescribed by § 1.63, except as provided for in § 1.53(d)(4) and § 1.63(c). If an oath or declaration as prescribed by § 1.63 is not filed during the pendency of a nonprovisional application, the inventorship is that inventorship set forth in the application papers filed pursuant to § 1. 53(b), unless a petition under this paragraph accompanied by the fee set forth in § 1.17(i) is filed supplying or changing the name or names of

the inventor or inventors.

For (title):

Blood Processing Systems with Fluid Flow Cassette with a Pressure

Actuated Pump chamber and In-Line Air Trap

1.	Type of Application This new application is for a(n)								
	[x] Original (nonprovisional) [] Design [] Plant								
NOTE:	lf one of the following 3 items apply then complete and attach ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF A PRIOR U.S. APPLICATION CLAIMED and a NOTIFICATION IN PARENT APPLICATION OF THE FILING OF THIS CONTINUATION APPLICATION.								
	[] Divisional. [] Continuation. [] Continuation-in-part (C-I-P).								
2.	Benefit of Prior U.S. Application(s) (35 U.S.C. 119(e), 120, or 121) [x] The new application being transmitted claims the benefit of prior U.S. application(s) Enclosed are ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEF OF PRIOR U.S. APPLICATION(S) CLAIMED.								
	CERTIFICATION UNDER 37 C.F.R. 1.10°								
United S	ertify that this New Application Transmittal and the documents referred to as attached therein are being deposited with the step Postal Service on this date 20 April 2004, in an envelope as 'Express Mail Post Office to Addressee' mailing Labe CV 318693809 5, addressed as follows: Mail Stop Patent Application oner for Patents, PO Box 1450, Alexandria, VA 22313-1450								
	Judith Dunaway (type or print name of person mailing paper)								
	Justil Dunaway								
	. Signature of person mailing paper								

(Application Transmittal - page 1 of 5)

3.	Papers Enclosed
	A. Required for filing date under 37 C.F.R. § 1.53(b) (Regular) or 37 C.F.R. § 1.153 Design) Application
	Pages of specification Pages of claims Abstract Sheets of drawing [x] formal [] informal
	B. Other documents enclosed:
4.	Additional papers enclosed
	 Preliminary Amendment Information Disclosure Statement (37 C.F.R. 1.98) Form PTO-1449 (PTO/SB/08A and 08B) Citations Declaration of Biological Deposit Submission of "Sequence Listing," computer readable copy and/or amendment pertaining thereto for biotechnology invention containing nucleotide and/or amino acid sequence. Authorization of Attorney(s) to Accept and Follow Instructions from Representative Special Comments Other
5.	Declaration or oath
	[] Enclosed [] newly executed [] copy from parent application identified above Executed by (check all applicable boxes) [] inventor(s). [] legal representative of inventor(s). [] joint inventor or person showing a proprietary interest on behalf of inventor who refused to sign or cannot be reached. [] This is the petition required by 37 CFR 1.47 and the statement required by 37 CFR 1.47 is also attached. See Item 13 below for fee.
	[x] Not Enclosed. [x] Application is made by a person authorized under 37 C.F.R. 1.41(c) on behalf of all the above named inventor(s). (The declaration or oath, along with the surcharge required by 37 CFR 1. 16(e) can be filed subsequently).
6.	Inventorship Statement The inventorship for all the claims in this application are: [x] The same. [] Not the same. An explanation, including the ownership of the various claims at the time the last claimed invention was made [] is submitted. [] will be submitted.

Papers Enclosed

7.	Language [x] English [] Non-English [] The attached translation includes a statement that the translation is accurate. 3 C.F.R. 1.52(d).							
8.	Assignment [x] An assignment of the Invention to Baxter International Inc. [] is attached. A separate [] COVER SHEET FOR ASSIGNMENT (DOCUMENT) ACCOMPANYING NEW PATENT APPLICATION or [] FORM PTO 1595 is also attached. [x] will follow. [] was filed in the parent application identified above							
9.	CERT	IFIED CO	OPY					
	Certifie	ed copy(i	es) of applic	cation(s)			·	· ·
	Country				· Appln. No.			Filed
	Country				Appln. No.	•		Filed
	Country				Appln. No.			Filed
	Country				Appin. No.		Filed	
	from which priority is claimed							
	[]	is (are) will folk	attached. ow.					·
NOTE:	: The foreign application forming the basis for the clam for priority must be referred to in the oath or declaration. 37 CFR 1.55(a) and 1.63.							
10.								
	A. ———	[x]	Regular a	pplication				
					LAIMS AS FIL	.ED	·	
				Number Filed	Number Included in Basic Fee	Number Extra	Rate	Basic Fee 37 CFR 1.16(a) \$770.00
Total 0	Claims 37	CFR 1.16(c) ·	1	-20 =	(19)	x \$ 18.00	\$0
Independent Claims (37 CFR 1.16(b) 1			1	-3 =	(2)	x \$ 86.00	\$0	
Multiple Dependent claim(s) if any (37 CFR 1.16(d))			0			\$290.00	\$0	
FILIN	IG FEE	CALCUL	ATION					\$770
			Amendme	ent deleting	ing extra claim g multiple-depe is not being pa Filing Fee	endencies e	enclosed. ime.	770.00

	B.	[]	Design application (\$340.00 - 37 CFR 1.16(f)) Filing Fee Calculation	
	C.	[]	Plant application	
	U. .	()	(\$530.00 - 37 CFR 1.16(g)) Filing Fee Calculation	
			•	
1.	Smal	The a	Statement applicant is a Small Entity as defined by 37 CFR 1. status.	
			Small Entity Filing Fee:	
2.	Foo F	Pavment	Being Made at This Time	· •
2.	[]		inclosed	•
	į j	[]	No filing fee is to be paid at this time. (This and the surcharge required by 37 C.F.R. 1	. 16(e) can be paid subsequently.)
	[x]	Enclo		
	1.41	[x]	Filing fee	770.00
		ii	Recording assignment	
		•	(\$40.00; 37 C.F.R. 1.21(h))	
		[]	Petition fee for filing by other than all the	
			inventors or person on behalf of the inventor	
			where inventor refused to sign or cannot be	
			reached (\$130.00; 37 C.F.R. 1.47 and 1.17(i)	
			For processing an application with a	
		[]	specification in a non-English language	-
			(\$130.00; 37 C.F.R. 1.52(d) and 1.17(k)	
		[]	Processing and retention fee	
		L J	(\$130.00; 37 C.F.R. 1.53(d) and 1.21(l))	
		[]	Fee for international-type search report	•
		()	(\$40.00; 37 C.F.R. 1.21(e))	
			Total fees enclosed	770.00
			and of Form	
13.		10d of P	ayment of Fees sk in the amount of \$ <u>770.00</u> .	
	[x]	Char	ge Account No in the amount of	•
	[]	A du	plicate of this transmittal is attached.	
		A du	piloate of and transmitted to a second	
14.	Auth	orizatio	on to Charge Additional Fees	
	[x]	The	Commissioner is hereby authorized to charge the fo	llowing additional fees by this paper
	• •	and o	during the entire pendency of this application to Ac	count No. 06-2360
		[x]	37 C.F.R. 1.16(a), (f) or (g) (filing fees)	outro eleima)
		[x]	37 C.F.R. 1.16(b), (c) and (d) (presentation of	extra ciaims)
		[x]	37 C.F.R. 1.16(e) (surcharge for filing the basic f	iiiig ice aliwol dedalation on a date
		, .	later than the filing date of the application) 37 C.F.R. §§ 1.17(a)(I-5) (extension fees pursu	ant to § 1.136(a)).
		[x]	37 C.F.R. 99 1.17(a)(i-5) (extension fees pursuant and areas pursuant areas pursu	7011. 10 2 11.100(m)/.
		[x]	37 C.F.R. 1.17 (application processing fees) 37 C.F.R. 1.18 (issue fee at or before mailing of	Notice of Allowance; pursuant to 37
		[]	C.F.R. 1.311(b))	

15.	Instructio	ons as to Overpayment	•			
		redit Account No. 06-2360 efund	- Wux			
Tel. No	o. 29,243 .: (262) 783 ner No.: 26		SIGNATURE OF PRACTITIONER Daniel D. Ryan (type or print name of attorney) RYAN KROMHOLZ & MANION, S.C. (P.O. Address) Post Office Box 26618			
	·	-	MILWAUKEE, WISCONSIN 53226			
[x]	Staten	nent Where Additional Pages a	are Added			
	[x]	Plus Added Page for Ne Application(s) Claimed	w Application Transmittal Where Benefit of Prior U.S			
[]	(if no fi	nent Where No Further Pages urther pages form a part of this the following item)	Added Transmittal, then end this Transmittal with this page and			
	[]	This transmittal ends with	this page.			

ADDED PAGES FOR APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED

NOTE: "In order for an application to claim the benefit of a prior filed copending national application, the prior application must name as an inventor at least one inventor named in the later filed application and disclose the named inventor's invention claimed in at least one claim of the later filed application in the manner provided by the first paragraph of 35 U.S.C. 112." 37 CFR 1.78(a).

NOTE: "IN ADDITION THE PRIOR APPLICATION MUST BE (1) COMPLETE AS SET FORTH IN S 1.51, OR (2) ENTITLED TO A FILING DATE AS SET FORTH IN S 1.53(B) AND INCLUDE THE BASIC FILING FEE SET FORTH IN S 1.16; OR (3) ENTITLED TO A FILING DATE AS SET FORTH IN S 1.53(B) AND HAVE PAID THEREIN THE PROCESSING AND RETENTION FEE SET FORTH IN S 1.21(L) WITHIN THE TIME PERIOD SET FORTH IN S 1.53(D). "37 CFR 1.78(A).

16. Relate Back-35 U.S.C. 120

NOTE: "ANY APPLICATION CLAIMING THE BENEFIT OF A PRIOR FILED COPENDING NATIONAL OR INTERNATIONAL APPLICATION MUST CONTAIN OR BE AMENDED TO CONTAIN IN THE FIRST SENTENCE OF THE SPECIFICATION FOLLOWING THE TITLE A REFERENCE TO SUCH PRIOR APPLICATION IDENTIFYING IT BY SERIAL NUMBER AND FILING DATE OR INTERNATIONAL APPLICATION NUMBER AND INTERNATIONAL FILING DATE AND INDICATING THE RELATIONSHIP OF THE APPLICATIONS." 37 CFR 1.78(A). SEE ALSO THE NOTICE OF APRIL 28, 1987 (1079 O.G. 32 TO 46).

[X] The specification includes the following recitation:

Related Applications:

This application claims the benefit of co-pending application Serial No. 09/390,265 filed 3 September 1999 and entitled "Fluid Pressure Actuated Blood Pumping Systems and Methods with Continuous Inflow and Pulsatile Outflow Conditions". This application also claims the benefit of copending patent application Serial No. 09/390,268 filed 3 September 1999 and entitled "Programmable Fluid Pressure Actuated Blood Processing Systems and Methods".

NOTE: THE PROPER REFERENCE TO A PRIOR FILED PCT APPLICATION WHICH ENTERED THE U.S. NATIONAL PHASE IS THE U.S. SERIAL NUMBER AND THE FILING DATE OF THE PCT APPLICATION WHICH DESIGNATED THE U.S.

NOTE: (1) WHERE THE APPLICATION BEING TRANSMITTED ADDS SUBJECT MATTER TO THE INTERNATIONAL APPLICATION THEN THE FILING CAN BE AS A CONTINUATION-IN-PART OR (2) IT IS DESIRED TO DO SO FOR OTHER REASONS, E.G. WHERE NO DECLARATION IS AVAILABLE, NO ENGLISH TRANSLATION IS AVAILABLE OR NO FEE IS TO BE PAID ON FILING THEN THE FILING CAN BE AS A CONTINUATION. IN THESE CASES THE INTERNATIONAL APPLICATION DESIGNATING THE U.S. IS TREATED AS THE PARENT CASE IN THE U.S. AND IS ANALTERNATIVE TO THE COMPLETION OF THE INTERNATIONAL APPLICATION UNDER 35 U.S.C. 371(C)(4) WHICH MUST MEET THE REQUIREMENTS OF 37 CFR 1.61(A). THIS ALTERNATIVE PERMITS THE COMPLETION OF THE FILING REQUIREMENTS WITHIN ANY TERM SET BY THE PTO UNDER 37 CFR 1.53(D) TO WHICH THE EXTENSION PROVISIONS OF 37 CFR 1.136(A) APPLY. (WHEREAS, IF THE FILING IS AS AN INTERNATIONAL APPLICATION ENTERING THE U.S. STAGE THEN THE FEE, DECLARATION AND/OR ENGLISH TRANSLATION (WHERE NECESSARY) IS DUE WITHIN 20 MONTHS OF THE PRIORITY DATE BUT CAN BE PAID WITHIN 22 MONTHS OF THE PRIORITY DATE (OR IS DUE WITHIN 30 MONTHS OF THE PRIORITY DATE BUT CAN BE SUBMITTED WITHIN 32 MONTHS OF THE PRIORITY DATE BUT CAN BE SUBMITTED WITHIN 32 MONTHS OF THE PRIORITY DATE BUT CAN BE SUBMITTED WITHIN 32 MONTHS OF THE PRIORITY DATE BUT CAN BE SUBMITTED WITHIN 32 MONTHS OF THE PRIORITY DATE BUT CAN BE SUBMITTED WITHIN 32 MONTHS OF THE PRIORITY DATE BUT CAN BE SUBMITTED WITHIN 32 MONTHS OF THE PRIORITY DATE BUT CAN BE SUBMITTED WITHIN 32 MONTHS OF THE PRIORITY DATE BUT CAN BE SUBMITTED WITHIN 32 MONTHS OF THE PRIORITY DATE BUT CAN BE SUBMITTED WITHIN 32 MONTHS OF THE PRIORITY DATE BUT CAN BE SUBMITTED WITHIN 32 MONTHS OF THE PRIORITY DATE BUT CAN BE SUBMITTED WITHIN 32 MONTHS OF THE PRIORITY DATE BUT CAN BE SUBMITTED WITHIN 32 MONTHS OF THE PRIORITY DATE BUT CAN BE SUBMITTED WITHIN 32 MONTHS OF THE PRIORITY DATE BUT CAN BE SUBMITTED WITHIN 32 MONTHS OF THE PRIORITY DATE BUT CAN BE SUBMITTED WITHIN 32 MONTHS OF THE PRIORITY DATE BUT CAN BE SUBMITTED WITHIN 32 MONTHS OF THE PRIORITY DATE BUT CAN BE

NOTE: THE DEADLINE FOR ENTERING THE NATIONAL PHASE IN THE U.S. FOR AN INTERNATIONAL APPLICATION WAS CLARIFIED IN THE NOTICE OF APRIL 28, 1987 (1079 O.G. 32 TO 46) AS FOLLOWS:

"The Patent and Trademark Office considers the International application to be pending until the 22nd month from the priority date if the United States has been designated and no Demand for International Preliminary Examination has been filed prior to the expiration of the 19th month from the priority date and until the 32nd month from the priority date if a Demand for International Preliminary Examination which elected the United States of America has been filed prior to the expiration of the 19th month from the priority date, provided that a copy of the international application has been communicated to the Patent

and Trademark Office within the 20 or 30 month period respectively.—If a copy of the international application has not been communicated to the Patent and Trademark Office within the 20 or 30 month period respectively, the international application becomes abandoned as to the United States 20 or 30 months from the priority date respectively. These periods have been placed in the rules as paragraph (h) of S 1.494 and paragraph (i) of S 1.495. A continuing application under 35 U.S.C. 365(c) and 120 may be filed anytime during the pendency of the international application."

17.	Relate Back-35 U.S.C. 1	19 Priority Claim fo	r Prior Application
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٠.	The iden	prie	or L ed a	J.S. a above	applicat e in iter	ion(s), including n 17, in turn its	g any prio elf claim(r International s) foreign prior	Applicatity (ies)	tion desiç as follow	inating the U	I.S.,
	cou	ntry	,			appl.	no.	filed o	'n			
	The	ce	be	en fil	opy (ies led on ₋ attach		in prior	application _		_ which	was filed on	<u>_</u> .
WARNIN		Burt appl is pl disp the the foldi- cont	au i icati acec osec pros folde ars,	may notes in a final i	not be reliais is so be folder and the nation of a cold transfer suitable of the folder.	the priority application on without any ecause the certified is not assigned a lat stage is not ententinuing application. Them to the continuer of notations, transcriptional stage may not income them to the may not be substantial. According a late of the may not be continued to the may not be provided in the priority of the priority	need to lile I copy of the U.S. Serial I red. Therefo An alternal ruing applica ansfer the ce ordingly, the p	a Centiled Copy of priority application yournber unless the ire such certified coince would be to phy ation. The resource ertified copies, ento priority documents	or one priori communio national si opies may i ysically ren es required er and mal	cated by the tage is ente not be avail nove the product to request ke a record	International Bared. Such folder able if needed la fority documents transfer, retriev of such copies	ureau rs are aler in from re the in the
18.	Mai	inte	na	nce	of Cop	endency of Pr	ior Appli	cation				
NOTE:	The pape	PTC ers c	fine onst	ds it u ituting	seful if a c	copy of the petition to of the continuation	filed in the pi application.	rior application exte	ending the	term for res	ponse is filed w	ith the
	A.]	[]	sion of time in A petition, for application up A copy of the	e and re	esponse exten	nds the	term in t	he pending	prior
					[]	A copy of the	peution i	nied in phor ap	phicalion	i is allac	ICU	
	B.		[1	Cond	itional Petition A conditional prior applicat	petition f	ension of Tim for extension o	e in Prio f time is	or Applic being file	ation d in the per	nding
					[]	A copy of the	condition	al petition filed	in the p	rior appli	cation is atta	ched
19.	Fu	rthe	er li	nven	torship	o Statement W	here Be	nefit of Prior	Applicat	tion(s) C	laimed	
NOTE:	If the continuation, continuation-in-part, or divisional application is filed by less than all the inventors named in the prior application a statement must accompany the application when filed requesting deletion of the names of the person or persons who are not inventors of the invention being claimed in the continuation, continuation-in-part, or divisional application. 37 CFR 1.62(a)											
NOTE:	Of the manufacture and selections and disclosure by amendment an oath of											

	(a)		This application discloses and claims only subject matter disclosed in the prior application whose particulars are set out above and the inventor(s) in this application are [] the same. [] the following inventor(s) have been deleted: [] the following inventor(s) have been added:
	(b)	[]	This application discloses and claims additional disclosure and a new declaration or oath is being filed. With respect to the prior application the inventor(s) in this application are [] the same. [] the following inventor(s) have been deleted:
			the following inventor(s) have been added:
	(c)	The int	ventorship for all the claims in this application are the same. not the same, and an explanation, including the ownership of the various claims at the time the last claimed invention was made [] is submitted. [] will be submitted.
20.	Aband	Please when the	t of Prior Application (if applicable) abandon the prior application at a time while the prior application is pending or the petition for extension of time or to revive in that application is granted and this application is granted a filing date so as to make this application copending aid prior application.
NOTE:	CONTIN OF TIME APPLIC	UATION-I E OR A F ATION CO	THE NOTICE OF MAY 13, 1983 (103, TMOG 6-7) THE FILING OF A CONTINUATION OR IN-PART APPLICATION IS A PROPER RESPONSE WITH RESPECT TO A PETITION FOR EXTENSION PETITION TO REVIVE AND SHOULD INCLUDE THE EXPRESS ABANDONMENT OF THE PRIOR ENDITIONED UPON THE GRANTING OF THE PETITION AND THE GRANTING OF A FILING DATE TO SEAPPLICATION.